

DECLARATION AND POWER OF ATTORNEY

COPY

As the below named inventors, we hereby confirm that:

- 1) Our residences, post office addresses and citizenships are as stated below next to our names, which are our full names.
- 2) We believe we are the original, first and joint inventors of the subject matter which is claimed and for which a patent is sought on the invention entitled:

METHOD AND APPARATUS FOR  
OCCLUSION CULLING IN GRAPHICS SYSTEMS

the specification of which is No. 09/121,317 Filed 07/22/98.  
We hereby state that we have reviewed and understand the contents of the above-identified specification, including the claims.

- 3) We acknowledge the duty to disclose information which is material to the examination of this patent application in accordance with Title 37, Code of Federal Regulations, Section 1.56(a).
- 4) No application to patent this invention has been filed in any country foreign to the United States prior to the date of this patent application.

We hereby declare that all statements made herein of our own knowledge are true and all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

**POWER OF ATTORNEY:** We hereby appoint the following attorneys to prosecute this patent application and to transact all business in the Patent and Trademark Office in connection therewith:

Roy W. Latham                      Reg. No. 29,820  
Douglas M. Clarkson,              Reg. No. 18,583

**SEND CORRESPONDENCE TO:** Douglas M. Clarkson  
1720 Fireside Place  
Alpharetta GA 30004

**Telephone & Fax:** 770/740-0880

**SIGNATURES:**

**Inventor:** Edward Colton Greene                      Date: September 24, 19  
Edward Colton Greene

**Address:** 140 Russell Avenue                      **Citizenship:** USA  
Portola Valley, CA 94028  
San Mateo County

Inventor:



Patrick Matthew Hanrahan

Date: Oct 16, 1998

Address:

40 Minoca Road  
Portola Valley, CA 94028  
San Mateo County

Citizenship: USA

COPY

# RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Edward C. Greene, Ph.D.

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: NVIDIA Corporation

Address: 3535 Monroe Street

Santa Clara, CA 95051

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment

☐ Merger

☐ Security Agreement

☐ Change of Name

☐ Other

Execution Date: October 2, 2000

4. Application number(s) or patent number(s):

A. Patent Application No.: 09/121,317

Title: METHOD AND APPARATUS FOR  
OCCLUSION CULLING IN GRAPHICS  
SYSTEMS

Filed Date: July 22, 1998

B. Patent No(s):

09/11/2003 HHARZ11 00000079 10658224

01 FC:8021

40.00 DP

Additional numbers attached? ☐ Yes ☒ No

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

5. Name and address of party to whom  
correspondence concerning document should  
be mailed:

Name: Warren S. Wolfeld, Esq.

Address: Fliesler, Dubb, Meyer & Lovejoy

Four Embarcadero Center, Suite 400

San Francisco, CA 94111

Telephone: (415) 362-3800

6. Total Number of applications and patents  
involved: 1 X \$40.00 each

7. Total fee (37 CFR 3.41).....\$ 40.00

☒ Check Enclosed

8. Fee Authorization. Authorization is given to charge  
any additional fees or credit any  
overpayment to Deposit Account  
No. 06-1325.

Copy. (A duplicate copy of this authorization is  
not enclosed.)

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached  
copy is a true copy of the original document.

Warren S. Wolfeld

Attorney (Reg. No.: 31,454)

Warren S. Wolfeld  
Signature

10/12/2000

Date

10. Total number of pages to be recorded: 3 (1-page cover sheet and 2-page document).

## ASSIGNMENT

WHEREAS, the undersigned, EDWARD C. GREENE ("Greene"), a resident of 140 Russell Avenue, Portola Valley, CA 94028, together with PATRICK M. HANRAHAN ("Hanrahan"), a resident of 40 Minoca Road, Portola Valley, CA 94028, has invented certain new and useful improvements in:

### **METHOD AND APPARATUS FOR OCCLUSION CULLING IN GRAPHICS SYSTEMS**

and has executed a declaration or oath for an application for a United States patent disclosing and identifying the invention, said application having SC/Serial Number 09/121,317 and filed with the United States Patent and Trademark Office ("USPTO") on July 22, 1998 (the "Application").

WHEREAS Greene is the sole owner of the Patent Application by reason of an Assignment from Hanrahan to Greene dated November 13, 1998.

WHEREAS Greene has granted certain non-exclusive license rights under the Application to Raycer, Inc. by way of a License Agreement dated as of August 5, 1999.

WHEREAS Greene has granted certain non-exclusive license rights under the Application to Apple Computer, Inc. by way of a License Agreement dated March 22, 2000.

WHEREAS NVIDIA Corporation ("NVIDIA"), a corporation of the State of Delaware, having a place of business at 3535 Monroe Street, Santa Clara, CA 95051, wishes to acquire the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention made or discovered by Greene and/or Hanrahan and disclosed therein (all collectively hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries, all subject to the license rights previously granted to Raycer, Inc. and to Apple Computer, Inc.

NOW THEREFORE, for good and valuable consideration acknowledged by Greene to have been received in full from NVIDIA:

1. Greene does hereby sell, assign, transfer and convey unto NVIDIA, subject only to the license rights previously granted to Raycer, Inc. and to Apple Computer, Inc., the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any and all countries of the world for patents, certificates of inventions or other governmental grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

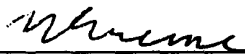
2. Greene hereby covenants and agrees to cooperate with NVIDIA to enable NVIDIA to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by Greene shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other

papers, and other assistance all to the extent deemed necessary or desirable by NVIDIA (a) for perfecting in NVIDIA the right, title and interest herein conveyed; (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefor and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions; provided, however, that the expense incurred by Greene in providing such cooperation shall be paid for by NVIDIA, and if Greene is not an Nvidia employee at the time that such cooperation is provided, he shall receive reasonable compensation for his time.

3. The terms and covenants of this Assignment shall inure to the benefit of NVIDIA, its successors, assigns and other legal representatives, and shall be binding upon Greene, his heirs, legal representatives and assigns.

4. Greene hereby warrants and represents that he has not entered and will not enter into any assignment, contract, or understanding in conflict herewith.

IN WITNESS WHEREOF, Greene has executed this instrument and delivered it to NVIDIA on the date indicated below.

  
\_\_\_\_\_  
Edward C. Greene, Ph.D.

10/2/00  
\_\_\_\_\_  
Date

COPY

# RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE  
Patent and Trademark Office

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):  
Patrick M. Hanrahan

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

Name: Edward C. Greene, Ph.D.

Address: 140 Russell Avenue

Portola Valley, CA 94028

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger

☐ Security Agreement ☐ Change of Name

☐ Other \_\_\_\_\_

Execution Date: November 13, 1998

4. Application number(s) or patent number(s):

A. Patent Application No.: 09/121,317

Title: METHOD AND APPARATUS FOR  
OCCLUSION CULLING IN GRAPHICS  
SYSTEMS

Filed Date: July 22, 1998

B. Patent No(s).:

Additional numbers attached? ☐ Yes ☒ No

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

5. Name and address of party to whom  
correspondence concerning document should  
be mailed:

Name: Warren S. Wolfeld, Esq.

Address: Fliesler, Dubb, Meyer & Lovejoy

Four Embarcadero Center, Suite 400

San Francisco, CA 94111

Telephone: (415) 362-3800

6. Total Number of applications and patents  
involved: 1 X \$40.00 each

7. Total fee (37 CFR 3.41).....\$ 40.00

☒ Check Enclosed

8. Fee Authorization. Authorization is given to charge  
any additional fees or credit any  
overpayment to Deposit Account  
No. 06-1325.

Copy. (A duplicate copy of this authorization is  
not enclosed.)

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing information is true and correct and any attached  
copy is a true copy of the original document.*

Warren S. Wolfeld

Attorney (R. g. No.: 31,454)

Warren S. Wolfeld  
Signature

10/12/2000

Date

10. Total number of pages to be recorded: 2 (1 page cover sheet and 1 page document).

## Assignment

Whereas, We, Edward C. Greene of 140 Russell Avenue, Portola Valley, California 94028, and Patrick M. Hanrahan of 40 Minoca Road, Portola Valley, California 94028 have invented certain improvements in

### METHOD AND APPARATUS FOR OCCLUSION CULLING IN GRAPHICS SYSTEMS

and have filed a United States patent application therefor which is No. 09/121,317 Filed 07/22/98, and

Whereas, said Edward C. Greene (hereinafter called "Greene"), desires to acquire the entire right, title and interest in and to said patent application, any patent or patents that may be granted thereon and the invention described and claimed therein, worldwide;

Now, therefore, for a valuable consideration, the receipt and sufficiency whereof is hereby acknowledged, I, the above identified Patrick M. Hanrahan, hereby sell, assign and transfer to said Greene, his successors and assigns, my entire right, title and interest in and to said patent application, any patent or patents granted thereon and the invention described and claimed therein, worldwide, and I hereby request the Commissioner of Patents and Trademarks to identify his interest on any Letters Patent that may issue in the United States for the invention described and claimed in said patent application.

Signed and sealed the month, day and year indicated below:

Nov 13 1998  
Date Signed

  
Patrick M. Hanrahan

STATE OF CALIFORNIA     )  
COUNTY OF SANTA CLARA ) ss.:

On this 13<sup>th</sup> day of November, 1998, before me personally came Patrick M. Hanrahan, and proved to me, on the basis of satisfactory evidence, to be the person whose name is subscribed to the above ASSIGNMENT and who acknowledged to me that he executed the same as an act of his own individual free will.

WITNESS my hand and official seal.



Notary Public:

